



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Fuyong Zhao

Serial No.: 10/665,190

Filed on: September 16, 2003

) Confirmation No.: 5579
)
) Examiner: NYA
)
) Group Art Unit No.: 2661
)

For: ANT-BASED METHOD FOR DISCOVERING A NETWORK PATH THAT
SATISFIES A QUALITY OF SERVICE REQUIREMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 together with copies of the documents cited on that form. It is respectfully requested that the cited documents be considered and that the enclosed Information Disclosure Citation Form PTO-1449 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

 X 37 C.F.R. §1.97(b).

 37 C.F.R. §1.97(c). If so, then this Information Disclosure Statement includes one of the following:

 A statement pursuant to 37 C.F.R. §1.97(e)

 1.97(e)(1) The undersigned hereby states that each item of information contained in this information disclosure statement was first cited in communication from a foreign patent office in a counterpart

foreign application not more than three months prior to the filing of this information disclosure statement.

_____ 1.97(e)(2) The undersigned hereby states that no item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement.

_____ A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

_____ 37 C.F.R. §1.97(d). If so, then this Information Disclosure Statement includes the following:

_____ A statement pursuant to 37 C.F.R. §1.97(e)

_____ 1.97(e)(1) The undersigned hereby states that each item of information contained in this information disclosure statement was first cited in communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement; OR

_____ 1.97(e)(2) The undersigned hereby states that no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of this information disclosure statement.

AND

_____ A check for \$180.00 for the fee under 37 C.F.R. §1.17(i) for submission of the Information Disclosure Statement.

_____ 37 C.F.R. §1.97(i). Wherein applicants are submitting references before the grant of a patent to be placed in the file but not considered by the Patent office.

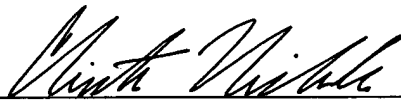
- (1) Accordingly, copies of the references as listed on the attached Form PTO 1449 are submitted herewith for placement in the file. No certification or fees are deemed necessary.

Throughout the pendency of this application, please charge any additional fees, including any required extension of time fees, and credit all overpayments to deposit account 50-1302. A duplicate of this sheet is enclosed.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: February 2, 2004



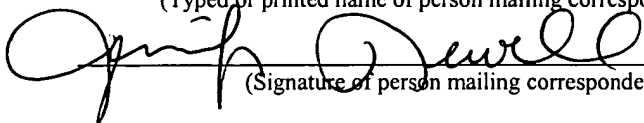
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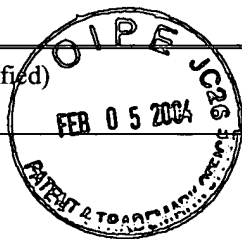
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February 3, 2003
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Jennifer Newell

(Typed or printed name of person mailing correspondence)



(Signature of person mailing correspondence)



Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)		Attorney Docket No.: 50325-0803	Application Number: 10/655,190
		First Named Inventor: Fuyong Zhao	
		Filing Date: September 16, 2003	
OTHER ART – NO PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation²
		S. Murphy, et al., "OSPF with Digital Signature," June 1997, Network Working Group, Request for Comments: 2154, http://www.ietf.org/rfc/rfc2154.txt?number=2154 , data retrieved 12/8/03, pp. 1-28.	
		David L. Mills, "Network Time Protocol (Version 3), Specification, Implementation and Analysis," March 1992, Network Working Group, Request for Comments: 1305, http://www.ietf.org/rfc/rfc1305.txt?number=1305 , data retrieved 12/8/03, pp. 1-107.	
		Y. Rekhter, et al., "A Border Gateway Protocol 4 (BGP-4)," March 1995, Network Working Group, Request for Comments: 1771, http://www.ietf.org/rfc/rfc1771.txt?number=1771 , data retrieved 6/5/03, pp. 1-54.	
		Gianni Di Caro, et al., "AntNet: Distributed Stigmergetic Control for Communications Networks," Journal of Artificial Intelligence Research 9, submitted 5/98, published 12/98, pp. 317-365.	
		Marco Dorigo, et al., "The Ant System: Optimization by a colony of cooperating agents," IEEE Transactions on Systems, Man, and Cybernetics-Part B, Vol. 26, No. 1, 1996, pp. 1-26.	
		Ruud Schoonderwoerd, et al., "Ant-Based load balancing in telecommunications networks," undated, pp. 1-26.	
		Felix Cho Zhao, Cisco Systems, Inc., "ANTD: An Adaptive, Deterministic Ant Routing Algorithm," 2003, Document Number: EDCS-255496, pp. 1-38.	
		Eric Bonabeau, et al., "Swarm Smarts," Scientific American, March 2000, pp. 72-79.	
		Dimitri Bertsekas, et al., "Data Networks," Prentice Hall, 1992, pp. 365-369 and 393-400.	

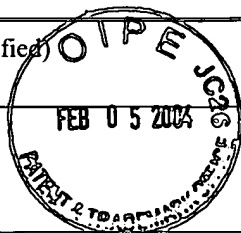
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Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 50325-0803	Application Number: 10/655,190
	First Named Inventor: Fuyong Zhao	
Filing Date: September 16, 2003		



OTHER ART – NO PATENT LITERATURE DOCUMENTS

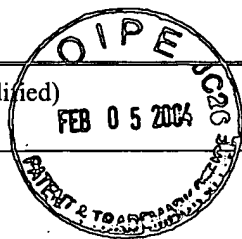
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation ²
		Andrew S. Tanenbaum, "Computer Networks," Second Edition, Prentice Hall, 1996, pp. 345-365.	
		Malvin H. Kalos, et al., "Monte Carol Methods, Volume I: Basics," 1986, pp. 1-3 and 129-140.	
		Richard Bellman, "Dynamic Programming," Princeton University Press, Princeton, NJ, 1957, 362 pages.	
		C. Hedrick, "Routing Information Protocol," June 1998, Network Working Group, Request for Comments: 1058, http://www.ietf.org/rfc/rfc1058.txt?number=1058 , data retrieved 1/14/04, pp. 1-31.	
		J. Moy, "OSPF Version 2," July 1991, Network Working Group, Request for Comments: 1247, http://www.ietf.org/rfc/rfc1247.txt?number=1247 , data retrieved 1/14/04, pp. 1-76.	
		Bruce Davie, et al., "MPLS Technology and Applications," Morgan Kaufmann Publishers, 2000, 301 pages.	
		E. Crawley, et al., "A Framework for QoS-based Routing in the Internet," August 1998, Network Working Group, Request for Comments: 2386, http://www.ietf.org/rfc/rfc2386.txt?number=2386 , data retrieved 1/14/04, pp. 1-35.	
		G. Apostolopoulos, et al., "QoS Routing Mechanisms and OSPF Extensions," August 1999, Network Working Group, Request for Comments: 2676, http://www.ietf.org/rfc/rfc2676.txt?number=2676 , data retrieved 1/14/04, pp. 1-47.	
		J. Moy, "OSPF Version 2," July 1997, Network Working Group, Request for Comments: 2178, http://www.ietf.org/rfc/rfc2178.txt?number=2178 , data retrieved 12/8/2003, pp. 1-197.	

Examiner Signature	Date Considered
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		Shigang Chen, et al., "Distributed Quality of Service Routing in High-Speed Networks Based on Selective Routing," IEEE, 1998, pp. 80-89.	
		Kang G. Shin, et al., "Distributed Route Selection for Establishing Real-Time Channels," August 30, 1999, pp. 1-29.	
		Hussein F. Salama, et al., "A Distributed Algorithm for Delay-Constrained Unicast Routing," IEEE, 1997, 8 pages.	
		Shigang Chen, et al., "An Overview of Quality-of-Service Routing for the Next Generation High Speed Networks: Problems and Solutions," pp. 1-19.	

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